# CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

# FOR INFRASTRUCTURE PROGRAM

June 15, 2011 August 15, 2011

#### I. PURPOSE

This attachment to the Real Assets Policy sets forth the investment policy ("Policy") for the Infrastructure Program ("Program").

## II. STRATEGIC OBJECTIVES AND ROLE

In addition to strategic objectives described in the Real Assets Policy, section II., the Program shall be managed, to accomplish the following:

- A. Preserve investment capital;
- B. Generate <u>stable investment returns that are attractive, on a risk-adjusted rates of return for CalPERS as a total return investor, including basis, relative to the following components: program benchmark ("Program Benchmark");</u>
- B.C. Provide cash distributions, as a prominent component of investment returns;
  - 1. Provide, at a minimum, moderate cash flow from operations with the generation of cash flow secondary to producing long term total returns; and,
  - Provide appreciation potential as a result of employing operational improvements and active best management techniques and practices.
- C.<u>D. Hedge Provide long-term against inflation protection;</u> Hedge against long-term liabilities;
- D.E. Diversify CalPERS investments;
- Establish CalPERS reputation as a premier infrastructure investment manager and investor of choice within the investment community;
- F.G. PracticeAct as a responsible investment to support steward of Program investments through efficient operation of assets, delivery of quality

services, utilization of responsible labor and management practices and implementation of responsible environmental practices; and,

G.H. Foster renewal and expansion of infrastructure assets.

#### III. RESPONSIBILITIES

- A. In addition to responsibilities described in the Real Assets Policy, section III., CalPERS Investment Staff ("Staff") is also responsible for <a href="mailto:the-normalize-staff">the-normalize-staff</a>.
  - Reporting to the Committee quarterly, or more frequently in the form of an Infrastructure Staff report, the following items:
    - a. Policy Variance. Information comparing actual portfolio composition versus the Policy limits and ranges for Infrastructure Key Policy Parameters (detailed in Section V.F.3, V.G., and Section X). This shall include:
      - 1) Variances for each Infrastructure Key Policy
        Parameter applied in accordance with the
        requirements of Section V.F.3., related to Program
        size;
      - Explanations of the variances and non-compliance, if any; and,
      - 3) When applicable, a summary update of the corrective plan and timeline to return the portfolio to compliance with the Policy:
    - b. Leverage. Information listing the:
      - 1) Amount and the type of leverage; and,
      - Incremental changes to the leverage amounts.
    - c. Investment Activity. Information summarizing:
      - List and status of investment proposals under review; and,
      - 2) Investments and dispositions executed during the period if needed about the performance of the Program. In managing this Program, Staff will work cooperatively with the External Resources it has

retained as part of the spring-fed pool. Their primary purpose shall be to serve as an extension of Staff. Staff may also use outside experts, as appropriate, to provide specialized expertise in various disciplines, on a one time basis.

- Reporting to the Committee at least annually, information outlining progress regarding implementation of the most recent Infrastructure Strategic Plan approved by the Committee.
- Screening, evaluating, and approving investment transactions that meet Infrastructure Delegated Resolution Authority ("Delegated Authority") guidelines.
- Screening, evaluating, and recommending investment transactions to the Committee that are beyond the scope of Staff's Delegated Authority.
- 5. Executing approved investment transactions, including negotiating investment agreements, performing initial and ongoing due diligence, and closing the transactions.
- 6. Managing interest rate, currency and commodity risks associated with individual transactions through application of hedge transactions ("Hedge Transactions"), subject to Delegated Authority.
- 7. Managing all aspects of the portfolio, including monitoring, evaluating performance, reporting, daily administration and cash flow management, and managing investor and governance initiatives including taking actions pursuant to investor rights.
- In managing this Program, Staff will work cooperatively with External Resources as needed or required.
- 9. Maintain and follow a documented internal Infrastructure investment decision-making process for the purpose of making investment decisions pursuant to Delegated Authority.
- B. The General Pension Consultant is responsible for monitoring, evaluating, and reporting quarterly, to the Committee, on the performance of the portfolio relative to the Program Benchmark Policy.
- C. Responsibilities of the CalPERS Board's Infrastructure investment consultant ("Infrastructure Consultant") as outlined in the Statement of Investment Policy for Role of Private Asset Class Board Investment

Consultants ("Policy for Private Asset Class Consultants") include strategy and policy analysis, performance monitoring and analysis, and providing independent advice to the Committee.

D. In addition to the responsibilities described in the Real Assets Policy, Section III., each manager and partner is responsible for all aspects of portfolio management as set forth in each manager and partner operating agreement or contract with CalPERS.

#### IV. PERFORMANCE OBJECTIVE AND BENCHMARK

- A. The intent of the Program is to provide stable long-term returns that meet or exceed the Program Benchmark while assuming suitable risk. To this end, Staff will pursue investments expected to provide rates of return that adequately compensate for underwritten investment risks. The long-term objective shall be to manage the Program to achieve real rates of return from individual assets held in the Program that exceed a target rate that is adjusted for risk depending on the nature of the investment including leverage and the country and region in which it is located with the overall target stated in the benchmark noted in B below.
- B. The <u>return Program Benchmark</u> benchmark for the Program is specified in the <u>Benchmark Modification and Benchmarks</u> Details Policy.

#### V. INVESTMENT APPROACHES AND PARAMETERS

A. <u>Infrastructure Portfolio Asset</u> Allocation

The asset allocation range for the Program is governed by the Real Assets  $\underline{P}_{P}$ olicy, section V.

- B. General Approach
  - 1. The Program shall seek to invest in opportunities within public and private infrastructure, including but not limited to, transportation, energy, power, utilities, water, waste, natural resources, utilities, water, communications and certain social infrastructure projects that meet the Program objectives. Staff shall review and manage investments in a disciplined and opportunistic manner. Staff shall manage the Program as a whole with specific criteria appropriate to listed securities, partnership and direct investments.
  - Staff shall review and manage investments in a diligent and prudent manner. Staff shall manage the Program as a whole using specific criteria appropriate for listed securities.

partnership and direct investments. Strategic assessments shall be made in order to identify portfolio weightings and identify the most attractive segments of the market available for investing. Based on these assessments, Staff shall proactively seek out the most attractive investment opportunities, while maintaining appropriate diversification.

2.3. To manage the level of risk and return in the portfolio, assets shall be managed in accordance with diversification parameters specified within this Policy. The primary focus of investment shall be to acquire significant private equity stakes; however, investments may also include public/listed debt, private debt, listed equity or other equity positions consistent with the Infrastructure Strategic Plan. Staff shall utilize a broad range of investment modes (each defined in section VII.), including Commingled Funds, Managed Co-Investments, Direct Co-Investments, Custom Accounts, and Direct Investments.

## C. Infrastructure Program Strategy

Staff shall develop and present for approval by the Committee an Infrastructure Strategic Plan that sets forth CalPERS long-term objective and plans for investment and management of the Program (the "Infrastructure Strategic Plan"). The Infrastructure Strategic Plan shall be reviewed annually by Staff with results of the review reported to the Committee, There may be situations where revisions to the Infrastructure Strategic Plan are required prior to the annual review.

Changes to the Infrastructure Strategic Plan require Committee approval. Staff shall develop and present a new Infrastructure Strategic Plan at a minimum every five years to the Committee. The CalPERS Infrastructure Consultant ("Infrastructure Consultant") shall review and provide its comments regarding the Infrastructure Strategic Plan to the Committee. The intent of the infrastructure program is to provide consistent, non-volatile and long term returns that exceed the benchmark while incurring modest risk. The intent of the program is not to participate in high risk and highly-leveraged transactions with excessive external manager fee structures. However, it is recognized that leverage is a financing mechanism that is utilized with most infrastructure investments and can be prudently and appropriately deployed. External manager fees for the infrastructure program will be commensurate with the risk and return profile of the infrastructure program.

## D. Portfolio Structure

The Program will be managed as a single portfolio. Investments will be acquired and disposed of consistent with the Infrastructure Strategic Plan and overall strategic objective and role of the Program.

## E. Risk Classifications

For effective risk management, the portfolio shall be divided into three Infrastructure investment risk segments ("Risk Segments"): Defensive: Defensive Plus; and Extended. Allocations to the Risk Segments shall be made to achieve the strategic objective and fulfill the role of the Program.

Staff shall assign risk classifications to investments at acquisition based on risk profile after consultation with the Infrastructure Consultant. Staff and the Infrastructure Consultant shall monitor the portfolio's actual weightings against the ranges and targets. When changes in the classification of investments are warranted based on changes in the profile of investments reclassification will be made by Staff after consultation with the Infrastructure Consultant and reported to the Committee.

<u>Classification of investments as Defensive, Defensive Plus or Extended will be based on an investment-level analysis across pertinent risk/return factors.</u>

<u>Defensive investments – are characterized substantially by the following elements:</u>

- 1. Essential assets and services
- 2. GDP resilience: demand inelasticity; pricing certainty
- 3. Minimal competition; strong barriers to entry
- 4. Stable revenues and returns; rate-regulated or long-term contracted
- 5. Low operating risk; allowed cost recovery
- 6. Long-term inflation protection
- 7. Strong credit quality off-takers or payers
- 8. Cash-generativeed investments

- Long-lived tangible assets
- 10. Low obsolescence risk
- 11. Low / no development risk
- 12. Low / no currency risk

<u>Defensive Plus Investments – carry greater return potential and greater risk than Defensive investments. Defensive Plus investments possess significant defensive qualities, although they generally feature greater degrees of risk associated with some of the following elements: competition; user patronage; regulation; contracts; construction; pricing; capital expenditure, terminal value; and growth.</u>

Extended Investments – carry greater return potential and greater risk than Defensive Plus investments. Such investments are "risk-extended" in that they generally feature significant risks associated with some of the following elements: competition; merchant business; growth; construction; development; technology; operating costs; pricing, capital expenditure; terminal value; commodity prices; legal/political/regulatory regime; and currency.

#### F. Diversification and Limits

- The overall portfolio shall maintain and appropriate level of diversification to mitigate risk. Infrastructure Key Policy Parameters shall be measured at the overall portfolio level, inclusive of all risk classifications, geographic guidelines, and leverage characteristics.
- 2. It is recognized that during the early investment period for the Program, the portfolio may not include sufficient investment in order to achieve diversification in line with the Infrastructure Key Policy Parameters. Therefore, the requirement to meet the Infrastructure Key Policy Parameters pertaining to Risk Segments and Geographic Segments as outlined below will be applicable for the time Program only when the NAV exceeds \$3.0 billion. Regardless of portfolio size, investment allocations within the Risk Segments and Geographic Segments are not to exceed, on a dollar basis, the upper ends of the Risk Segments and Geographic Segments ranges multiplied by the Program Allocation Target.
- 3. The following are Infrastructure Key Policy Parameters (Leverage requirements addressed in Section X):
  - a. Risk Segments (Defensive: Defensive Plus: Extended)

# <u>Investment shall be diversified across Risk Segments within</u> the following ranges:

Risk Classification	Allocation Range
<u>Defensive</u>	<u>25-75%</u>
Defensive Plus	<u>25-65%</u>
Extended	0-10%

The Program Strategy shall be revised periodically as appropriate and updated as necessary.

## A. Portfolio Allocation and Leverage

Sector	Strategy	Characteristics	Portfolio Allocation	Expected Real Return (CPI+)
Private	Core	Mature, operating assets with steady cash flows from operations     Low risk and typically low growth     Perpetual or long-term monopoly positions     Typically "buy and hold" assets o Cash yield is the dominant part of total return.	10% - 40%	<del>3% - 5%</del>
	Value Added	Less mature, operating assets in a growth phase     Higher return potential and higher risk in the execution of the growth strategies     May involve an expansion of capacity     May involve a "buy and build" strategy     Cash yield and net capital appreciation are more or less equal.	4 <del>0% - 70%</del>	<del>5% - 7%</del>
	Opportunistic	Can consist of greenfield construction and development     High risk and high return potential     May involve a roll up of small infrastructure businesses to create a regional or national platform     Capital appreciation forms the dominant part of total return.	0% - 20%	<del>8% - 12%</del>
Public	Listed	<ul> <li>Mature, operating assets with steady cash flows from</li> </ul>		

	operations		
		<del>0% -10%</del>	4% - 6%
	growth		
	<ul> <li>Traded equities of infrastructure</li> </ul>		
	<del>assets</del>		
	<ul> <li>Liquidity and market beta</li> </ul>		
	o Cash yield and capital		
	appreciation are more or less		
	equal.		
	<del>Total</del>	100%	> 5%

Geographic Segments: CalPERS shall pursue a global Infrastructure investment strategy, with emphasis in the United States. The following geographic diversification ranges will apply across the portfolio: The average leverage level for the infrastructure portfolio shall not exceed 65%. Individual investments may exceed the average leverage guideline depending upon the rating of the debt, Debt Service Coverage Ratio and the general characteristics of the investments. Investments exceeding 50% leverage shall be presented to the Committee for review and approval. As more investments are made in the portfolio and investments are made in different geographies, subsectors and with various investment managers, leverage levels will subsequently decrease below the stated average leverage level. Staff will report the average level of leverage in the program to the Committee on a quarterly basis.

Region	Allocation Range
<u>United States</u>	<u>40-80%</u>
Developed OECD ex US	20-50%
Less Developed	0-10%

<u>Developed OECD includes OECD nations which have established rules of law and regulation, stable political regimes, established and highly liquid domestic capital markets and highly convertible currency on global foreign exchanges.</u>

<u>Less Developed are all nations outside of the United States and Developed OECD.</u>

Staff will undertake hedging of non-USD currency exposure where and to the extent it is deemed necessarily prudent and feasible, and subject to Delegated Authority for Hedge Transactions.

## c. Public Equity Securities

# <u>Public Equity Securities shall not exceed 10% of CalPERS Infrastructure Program Allocation.</u>

B. Investment Type Risk Matrix

The table below classifies investment types by risk for the purposes of investment selection and portfolio construction. The program will primarily target investments in the low and medium risk categories. Investments in the higher risk category will be considered to be part of the opportunistic segment and will not exceed 20% of program.

Risk Matrix			
Risk	Low Risk	Medium Risk	High Risk
	Seasoned toll roads, bridges, and tunnels.	Airports, seaports	New build of toll roads, bridges, tunnels, airports
	Regulated water/wastewater	Unregulated water/wastewater	Greenfield project development
Project	Social infrastructure (hospitals, schools, prisons)	Industrial water/wastewater	Communications (broadcast, satellite, cable)
Example	Regulated electric and gas	Contracted independent power generation	Merchant power plants
		Gas pipelines and storage (including LNG)	
		Rail	
		Other commercial/industrial infrastructure	
		Listed	

Power projects with significant commodity risks will be excluded unless such risks are mitigated or hedged. Merchant power projects which assume a spot price risk for power will be excluded.

## C. Regional Allocation

Region	Allocation	Example
USA	40% -70%	
OECD Countries	<del>20% - 40%</del>	Canada, Mexico, UK, Australia, Austria, Belgium, Czech Republic, Denmark,
(ex-USA)		Finland, France, Germany, Greece,
		Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Netherlands, New
		Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland,
		Turkey
Regions,	<del>0% - 20%</del>	Asia, Caribbean, Latin America, Central
non-USA,		Europe, Middle East, North Africa
non-OECD		

Staff will be guided by the CalPERS Emerging Market Principles in the case of direct investments in such countries and will report any investments on an annual basis. In the case of funds or partnership investments where CalPERS is a minority investor staff will report any emerging market investments relative to CalPERS Emerging Market Principles on an annual basis to the Committee.

#### D. Concentration Limits

## G. Other Diversification Requirements

# <u>In order to limit concentration risks, investments shall not exceed the following limits:</u>

Concentration Limits		
Any single investment in a	No more than 25% of committed capital	
partnership or fCommingled	of such Commingled Fund	
<u>F</u> und		
Aggregate CalPERS	No more than 30% of CalPERS	
commitment to a single	Infrastructure Program aAllocation	
general partner, <u>Commingled</u>		
Fund or Custom Accountfund		
or separate account		
Any single <u>d</u> irect <u>i</u> Investment	No more than 10% of CalPERS	
	Infrastructure Program aAllocation	
Equity <u>I</u> investments	70% - 100% of CalPERS Infrastructure	
	Program Allocation	
Debt <u>i</u> Investments	0% - 30% of CalPERS Infrastructure	
	Program Allocation	

## H. Other Guidelines

## 1. CalPERS Emerging Equity Markets Principles

Staff shall be guided by the CalPERS Emerging Equity Markets Principles for all investments in such countries. Staff shall report any such exposure on an annual basis to the Committee.

## 2. United Nations Principles for Responsible Investment

For investments in all Developed, Emerging, and Frontier Mmarkets, Staff shall be guided by the United Nations Principles for Responsible Investments.

## Renewable Energy and Sustainability

CalPERS encourages the prudent use of sustainable development methods and operational practices when reasonable and economically feasible. Consideration shall be given to the use of renewable energy technologies, recycled and renewable building materials, air and water conservation technologies and practices, and efficient waste, recycle and disposal technology and practices. Consideration shall also be given to the environmental sustainability of investments including, but not limited to, energy efficiency, fuel economy, alternative energy generation and distribution impacts.

## Quality Control Processes

- 1. Staff shall maintain an internal procedure manual ("Manual"). The Manual will provide guidance and detail steps for key procedures, risk mitigation measures, and processes associated with the Infrastructure Program. The Senior Investment Officer, Real Assets ("SIO-RA") and Infrastructure Consultant shall approve the initial Manual. Annually, Staff and the Infrastructure Consultant shall review the Manual to ensure the Manual is consistent with sound business practices in the institutional investment industry. Substantive changes to the Manual require the SIO-RA and Infrastructure Consultant"s approval.
- Annually, Staff and the Infrastructure Consultant will review internal procedures to identify material issues requiring corrective action or improvement.

3. On an ongoing basis, Staff will endeavor to identify problems early and take corrective action promptly.

## J. Risk Parameters

There are specific risks associated with investments that shall be considered by Staff in its due diligence assessments, including but not limited to, the following:

- 1. Financial Risk: Infrastructure investments may employ substantial leverage (borrowing), which may result in significant financial risk.
- Liquidity Risk: Infrastructure investments may lack liquidity and may have time horizons greater than 10 years. Secondary markets for such investments can be very limited.
- 3. Capital Markets Risk: Capital markets experience volatility and changes in these markets may have a significant impact on the cost of financing infrastructure investments and overall transaction execution.
- 4. Political and Public Risk: Infrastructure investments may be subject to risks associated with political approval and public acceptance of projects.
- Labor Risk: Risks associated with public sector outsourcing, or labor relations may affect investment opportunities in infrastructure.
- 6. Regulatory Risk: Changes in regulatory conditions may affect investment returns.
- 7. Country Risk: Political, economic, and currency risks are associated with investing in all countries.
- Governance Risk: Risks may arise from mismanagement and partner misalignment or lack fundamental governance and ownership rights, protections and remedies.
- Valuation Risk: Risks are associated with failure by a general partner or partnership to employ an appropriate valuation methodology and discipline.
- 10. Market Risk: The infrastructure market continues to develop globally and market opportunities can change depending on many variables such as market supply and demand.

- 11. Environmental and Climate Risk: Long term investment returns may be impacted by risks and opportunities related to the environment and climate change.
- 12. Hazardous Materials: Risks are associated with the use of hazardous materials in facilities or business processes.
- 13. Counterparty Risk: Infrastructure investments may rely on the financial strength of off-takers, hedge provider, suppliers, service providers and constructors.

### VI. CALCULATIONS AND COMPUTATIONS

Investors, managers, consultants and other participants selected by CalPERS shall make all calculations and computations on a fair market value basis which shall be recorded by CalPERS Custodian.

## VII. INVESTMENT STRUCTURES

CalPERS may invest capital for the portfolio in the form of private and public/listed equity and debt through a variety of investment structures, including Commingled Funds, Managed and Direct Co-Investments, Custom Accounts, and Direct Investments. CalPERS may invest in securities directly or through partnerships, limited liability companies, limited duration companies, corporations, or trusts. CalPERS investments will be structured in order to limit liability and potential loss to the amount of CalPERS Investment. The Program will employ both direct investment structures and managed strategies. Investments may be sourced directly or through third parties.

#### A. Type of Structures

- 1. Commingled Funds are structures through which CalPERS holds an interest alongside other investors in an investment partnership managed by a general partner or manager. Investments in closed end funds, open end funds, and side by side investments are included. Commingled Fund structures may be used where appropriate to accomplish strategic objectives outlined in Section II.
- 2. Co-investments are investments alongside Commingled Fund investments. Co-investments may be directly or indirectly owned and managed. Whereas Managed Co-Investments may be managed by a general partner or other external manager, Direct Co-Investments typically involve a greater degree of internal management discretion and ownership control. Co-Investments may be investments in the

same security or a difference class of security than the class held by the fund investment.

- 3. Direct investments are direct ownership interests in assets or companies.
- 4. Custom Accounts are investment agreements or forms of investment partnership involving an external manager, and providing CalPERS with discretionary authority over select strategic matters.

## B. Legal Structures

<u>Program investments shall include appropriate governance rights, restrictions and protections. Investment partnership agreements will utilize, to the extent practicable, a legal structure which appropriately:</u>

- 1. Limits CalPERS financial exposure; and,
- 2. Minimizes taxes, fees and other liabilities.

## C. Required Terms

Staff shall maintain as part of the Manual, a standard list of terms for investment partnership agreements reflecting appropriate alignment of interest principles. Staff shall be guided by such principles when considering and negotiating investment partnership agreements.

## D. Investment Holding Period and Dispositions

The Program will generally target long-term investment (at least five years or more). However, dispositions of individual investments may be triggered by a variety of opportunities and circumstances, such as opportunities to capture returns in excess of targeted returns, decisions by partners or shareholders, and investment strategy revisions resulting from changes in markets for infrastructure assets or changes in CalPERS financial objectives.

#### E. Restrictions and Prohibitions

<u>Investment is prohibited in Tobacco Companies, any investment prohibited by CalPERS Insider Trading Policy, and any other Committee approved restriction.</u>

## F. Public and Private Partnership Investments and Requirements

## D.1. Domestic Public Private Partnerships

It is the intent of this policy that in evaluating those domestic Public Private Partnerships ("PPPs") in which CalPERS may invest, that Staff, and where appropriate, the Committee will consider the extent to which the sponsoring public entity and the investor(s) share in the benefits and risks associated with the PPP.

Infrastructure assets, by definition, support services that benefit society as a whole and are intended to serve a long and useful life. Recruiting and training a high quality workforce associated with these assets may lead to long term economic value by providing safe, reliable, efficient and high quality services.

- Domestic Responsible Contractor Program, Preference and Domestic Public Sector Jobs
  - 4. Responsible Contractor Policy and Preference
  - a. Staff shall secure written agreement from managers of any investment vehicle, for which the Responsible Contractor Program ("RCP") applies, such that all contractors, investors, managers, consultants or other participants shall adhere to CalPERS investment policy for the RCP, as amended from time to time by CalPERS, in its sole discretion.
  - b. Preference: Staff shall give a strong preference to all domestic infrastructure investment vehicles that have adopted an internal policy regarding responsible contracting consistent with the CalPERS RCP subject to CalPERS fiduciary duty.
  - c. This preference shall apply to any domestic infrastructure investment vehicle for which the RCP is not applicable by its terms other than to make a good faith effort to comply with the spirit of the policy. This specifically applies to investments including, but not limited to, commingled funds, opportunity funds, mezzanine debt, and hybrid debt investments.
  - d. If the manager of any domestic investment vehicle does not agree to comply with Sections VI<u>I.F.2.a.</u> (D)(1)(a) or adopt an internal policy regarding responsible contracting, and, if Staff deems it appropriate based on all the circumstances, including the intent of this Policy as well as the investment merits of the investment vehicle, Staff may recommend the potential investment to the Committee and the Committee

shall make a determination whether or not to invest in such investment vehicle.

e. Enforcement: In the event it is determined that during the life of an investment vehicle there is a violation of the above stated terms, Staff shall be precluded from making an investment in a follow on fund with the investment manager. If Staff determines it appropriate, based on all the facts and circumstances, Staff may recommend the investment in the follow on fund to the Committee, which will determine whether to invest in the follow on fund consistent with its fiduciary duty. In addition, in situations where the RCP applies by the terms of this policy, all terms of the RCP including enforcement related terms would apply.

#### 2.3. Domestic Public Sector Jobs

- a. CalPERS intends, consistent with Section II and with CalPERS constitutional and statutory duties to act solely in the interest of, and for the purpose of providing benefits to, participants and their beneficiaries and to make sound and prudent investments, not to make investments that will result in job losses to CalPERS members. If CalPERS staff determines that it is in the best interest of CalPERS, consistent with CalPERS fiduciary responsibilities, to consider an investment that would directly impact California public sector jobs, staff will present the investment to the Committee for consideration.
- Staff shall secure a written agreement from the managers of b. any domestic investment vehicle (as described herein) that states, substantially in all material respects, that in circumstances where the investment vehicle is working with a domestic state, local or municipal agency to establish PPPs or to bid on public offers for the sale, lease or management of public assets, the investment vehicle shall make every good faith effort to recognize the important role and contribution of public employees to the development and operation of such assets. In particular, the investment vehicle shall make every good faith effort to ensure that such transactions have no more than a de minimisde minimis adverse impact on existing employees. These efforts shall include working directly with public employees, government officials, or collective bargaining groups, as appropriate, in order to take such reasonable actions as may be within the investment vehicle"s control to mitigate such

potentially adverse effects. Compliance with this requirement shall be a key consideration by CalPERS when reviewing any future investment opportunities with an investment manager.

c. Enforcement: In the event it is determined that during the life of an investment vehicle there is a violation of the above stated terms, Staff shall be precluded from making an investment in a follow on fund with the investment manager. If Staff determines it appropriate, based on all the facts and circumstances, Staff may recommend the investment in the follow on fund to the Committee, which will determine whether to invest in the follow on fund consistent with its fiduciary duty. The follow on fund would be required to enter into the written agreement in subsection b. above.

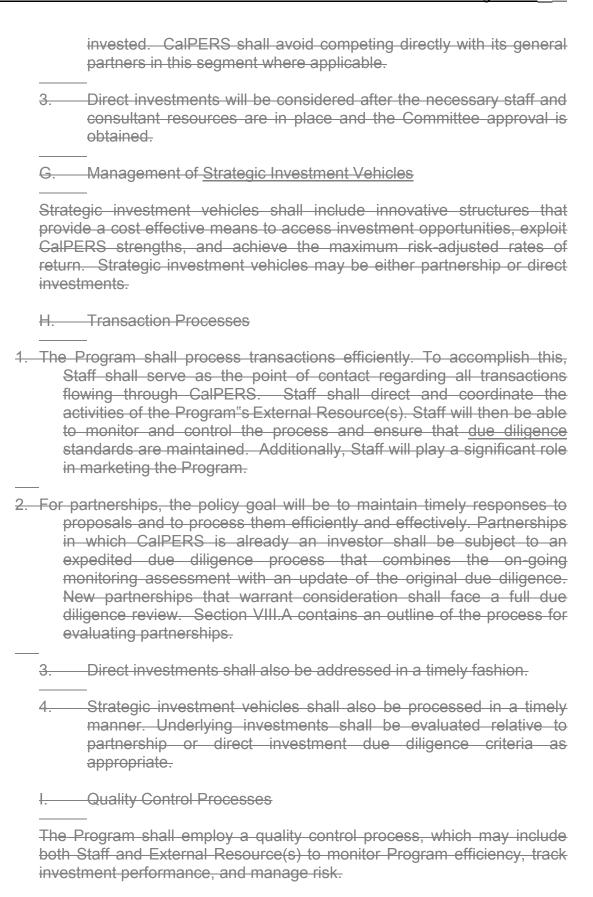
E. Management of Partnership Investments

The Program shall be continually refined to obtain the most effective mix of investments. The Program shall invest in traditional partnership investments, and, as appropriate, funds employing other structures.

F. Management of Direct Investments

The Program shall utilize two types of direct investments: <u>Co-Investments</u> and <u>Independently Sourced Investments</u>. <u>Co-investments and independently sourced investments may be managed through partnerships, separate account structures, or other formation structures, e.g. limited liability companies (LLCs) where the <u>general partner(s)</u> or fund manager(s) have expertise in the specified mandates and in related areas material to the success of each investment vehicle or strategy.</u>

- 1. Co-Investments are direct investments by CalPERS together with an existing general partner or fund manager. CalPERS may invest in the same security as or a different security in the same asset class than the general partner; for example, preferred versus common stock or voting versus non voting class of shares. The investment may be with a partnership or investment vehicle in which CalPERS has invested or it may be from another partnership or investment vehicle sponsored by the same general partner.
  - 2. Independently Sourced Investments come to CalPERS through contacts other than the general partners with which CalPERS has



1.	Monitor Process - Staff monitors transaction processing to insure
	timely decision making and an effective process.
	2. Monitor Portfolio Performance Actual returns are compared to the Program"s performance objectives, and to the expected return fo the investment.
	3. Monitor Risk Control – Program standards are maintained through the following processes:
	a. Assess the level of diversification in the portfolio on a continual basis, including the level of diversification across investment style, geographic distribution, industry concentrations and across other ranges as appropriate.
	b. Track and monitor due diligence activity and review the External Resource's due diligence. Monitor External Resource's activities and internal policies and procedures.
C	Identify problems early and take corrective action quickly.
	J. Risk Parameters
1.	Financial Risk: Infrastructure investments may employ substantia leverage (borrowing), which may result in significant financial risk.
2.	Liquidity Risk: Infrastructure investments may lack liquidity and may have time horizons greater than 10 years. Secondary markets for such investments can be very limited.
3.	Credit Risk: Credit markets experience volatility and changes in these markets may have a significant impact on the cost of financing infrastructure investments and overall transaction execution.
	Political and Public Risk: Infrastructure investments may be associated with political approval and public acceptance of projects
	5. Labor Risk: Risks associated with public sector outsourcing, o labor relations may affect investment opportunities in infrastructure.
	6. Regulatory Risk: Changes in regulatory conditions may affect investment returns.
7.	——————————————————————————————————————

Structural Risk: CalPERS negotiates its agreements to include certain fundamental rights, protections and remedies. These basic protections include advisory committee participation, specific termination provisions in partnership transactions, anti-dilutions, put and call options, voting rights for material events, and other covenants and governance provisions in the case of direct investments. Valuation Risk: Partnerships shall be evaluated to determine if the general partner employs an appropriate valuation discipline. For direct investments, the Staff shall review valuations to determine if they are reasonable. 10. Market Risk: The infrastructure market continues to develop globally and market opportunities can change depending on many variables such as market supply and demand. Environmental and Climate Risk: Long term investment returns may be impacted by risks and opportunities related to the environment and climate change. 12. Hazardous Materials: Implementation of the Program shall comply

at all times with CalPERS Hazardous Materials policy.

#### Guidelines for Evaluating Proposals

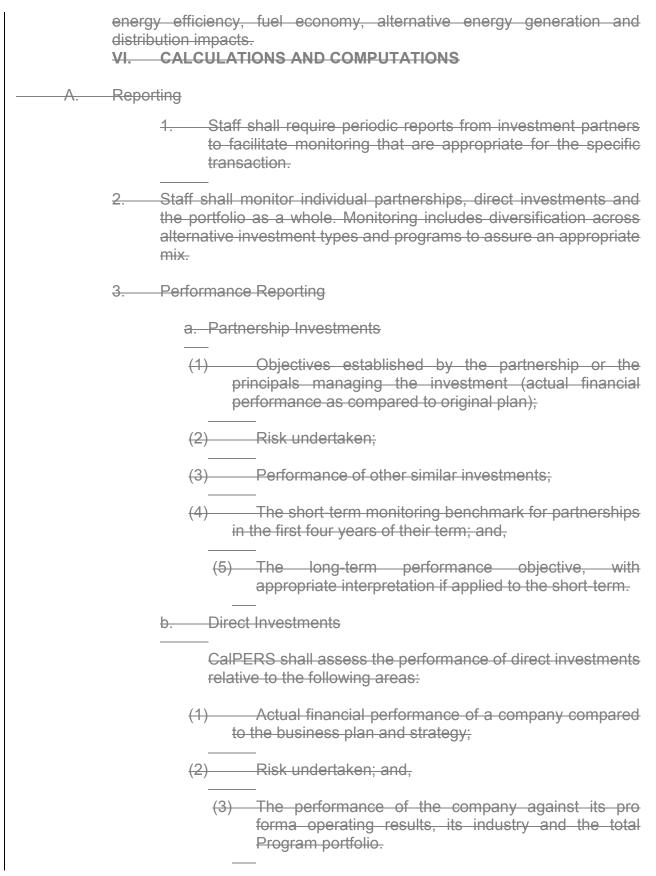
#### Proposed

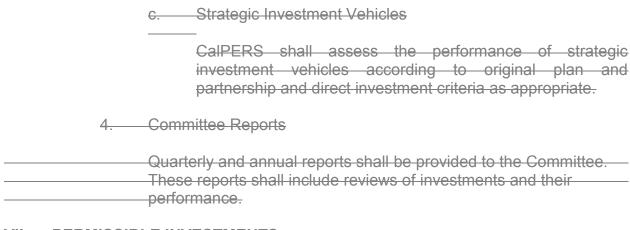
partnership, direct investment, and strategic investment vehicle opportunities shall be evaluated relative to their fit with the Program Strategy.

Section VIII contains outlines of specific guidelines for partnerships and direct investments, respectively. Strategic investment vehicles shall be evaluated according to the underlying structure of the investment, which may include either partnership or direct investments.

## M. Renewable Energy and Sustainability

CalPERS encourages the prudent use of sustainable development methods and operational practices when reasonable and economically feasible. Consideration shall be given to the use of renewable energy technologies, recycled and renewable building materials, air and water conservation technologies and practices, and efficient waste, recycle and disposal technology and practices. Consideration shall also be given to the environmental sustainability of investments including but not limited to





#### VII. PERMISSIBLE INVESTMENTS

#### VIII. INVESTMENT SELECTION

## A. Investment Authority

Investments shall be selected by CalPERS Staff pursuant to Delegated Authority, or otherwise with approval of the Committee. The Infrastructure Delegation Resolution specifies when Committee approval is required.

## B. Investment Process

The following steps are required to be completed prior to closing an investment:

- CIO or SIO Approval. CIO or SIO-RA approval in accordance with <u>Delegated Authority limits is required after recommendation by</u> <u>Infrastructure Senior Portfolio Manager ("SPM");</u>
- Opinion from the Infrastructure Consultant. For investment decisions exceeding Staff"s Delegated Authority the Infrastructure Consultant will provide an opinion on the transaction to the Committee:
- 3. Prudent Person Opinion. For investments in excess of a materiality threshold established in the Policy for Private Asset Class Consultants, an independent due diligence engagement is required to be performed. In such cases, a written favorable concurring Prudent Person Opinion in accordance with the requirements of the Policy for Private Asset Class Consultants, is required;
- 4. Policy Compliance Review. The linfrastructure Ceonsultant is required to document the transaction complies with Policy and Delegated Authority; and,

5. Legal Review. For investments in excess of a materiality threshold established in Delegated Authority, the Legal Office is required to document the transaction complies with Delegated Authority.

## C. Investment Criteria

<u>In choosing specific investments for the Program, consideration shall be given, but not limited to the following:</u>

- 1. Proposed investment strategy:
- Expected risk and return attributes;
- Potential diversification benefits;
- Investment time horizon;
- Potential exit strategies and liquidity;
- Monitoring costs and feasibility:
- 7. Tax considerations;
- Other incremental costs;
- Fee arrangements;
- 10. Co-investment by management firm or partner(s):
- 11. Potential conflicts of interest:
- 12. Governance and control;
- 13. Financial strength, reputation and alignment of Partners or coinvestors; and
- 14. Performance track record.

#### D. Investment Parameters

<u>CalPERSStaff</u> shall consider any appropriate investment opportunity <u>which it believes has with</u> the potential to meet or exceed the Program's performance objectives. Investments shall generally fall within the categories defined below.

#### 1. Infrastructure Sectors

CalPERS shall consider investment opportunities within, but not limited to, the following infrastructure sectors:

- <u>a. Transportation (roads, bridges, tunnels, mass transit, parking, airports, seaports, rail);</u>
- <u>b.</u> Energy (oil, natural gas and liquids, pipelines, storage, and distribution);
- <u>c.</u> Power (transmission, distribution, generation, including renewables);
- <u>d.</u> Water (water storage, transportation, distribution, treatment and waste water collection, transportation, treatment and processing);
- e. Communications (towers and networks)
- <u>f. Social Infrastructure (building facilities such as health, education, justice, military); and,</u>
- g. Other infrastructure investments that are aligned with CalPERS strategic objectives.
- Transportation assets (e.g. bridges, roadways, railways, transit and tunnels);
   Ports (e.g. airports, seaports, barges and terminals);
   Utilities (e.g. clean energy, pipelines, storage and distribution and power transmission);
   Water (e.g. water treatment, distribution, storage, desalination and other water related investment areas);
- 6. Energy resources (e.g.- hydrocarbons, gas, geothermal, wind-generated, water-generated, and nuclear; transmission; and distribution);
- 7. Communications (e.g. broadcast and wireless towers, cable systems and satellite networks);
- 8. Social Infrastructure (e.g. educational facilities, healthcare facilities and judicial buildings); and,

	Other infrastructure investments that are aligned with CalPERS trategic objectives.
PI	— Restrictions and Prohibitions: Tobacco Companies, any investment rohibited by CalPERS Insider Trading Policy, and any other committee approved restriction.
11.	Structures and Investment Vehicles
inves funds held	Program shall be implemented primarily through direct equity stments in infrastructure (either 100% owned or through partnerships, s, joint ventures or other co-investment vehicles). Equity (privately-or publicly traded), leveraged equity, and debt instruments with y-like features, are also appropriate structures for investments.
	ERS shall consider a number of different vehicles for investments ding, but not limited to, the following:
1.	Equity Investments in 100% owned assets;
2.	Equity joint-ventures or other co-investment vehicles;
3.	<ul> <li>Indirect equity investments in commingled funds; private or public corporations; <u>limited partnerships</u>; or other pooled investment vehicles;</li> </ul>
4.	<ul> <li>Private placements of equity or debt in public or private infrastructure operating companies;</li> </ul>
<del>5</del> .	Investment grade as well as lower or unrated tranches of pre- existing securitized or lower structured debt instruments, such as mezzanine or other debt with equity-like features;
6.	Leveraged equity investments;
7.	
8.	— Futures or swaps on listed infrastructure indices on a fully collateralized basis; and,
12.	Selection Considerations
	— noosing specific investment vehicles for the Program, consideration be given, but not limited to the following:

- 1. Proposed investment strategy;
  2. Expected risk and return attributes of vehicles;
  3. Potential diversification benefits;
  4. Investment time horizon;
  5. Potential exit strategies and liquidity;
  6. Monitoring costs and feasibility;
  7. Tax considerations;
  8. Other incremental costs;
  9. Fee arrangements;
  10. Co investment by management firm or partner;
  11. Potential conflicts of interest;
  12. Governance and control;
  13. Partners or co investors; and,
  14. Performance track record.
  - D. Diversification by Geography

The Program shall seek to include investments in a variety of jurisdictions. Investments in both domestic and international markets are permitted with the relative proportion of each type at a given time to be determined based on prevailing market conditions. Regional diversification within a particular country shall also be considered when such diversification contributes measurably to risk mitigation. Section VI.B.3 provides the Regional Allocations for the infrastructure investments.

#### E. Diversification by Revenue and Strategy

The Infrastructure portfolio shall be diversified so that no one source of revenue is dominant in the portfolio of the Program.

The SIO-RA will review the investments in infrastructure assets and vehicles regularly and identify adjustments when necessary to ensure satisfactory diversification by geography and revenue sources.

Adjustments to diversification in the Program shall be implemented on an opportunistic basis over a reasonable time frame (normally within a three-year period), and with ample consideration given to preserving the investment returns to CalPERS. Section VI.B.1 provides the Portfolio Allocation for infrastructure investments.

## F. Diversification by Asset Size

The size of portfolio investments shall depend on the opportunities available to CalPERS, with neither small nor large investments being dominant in the Program. Furthermore, investment size shall be appropriate to the projected risk versus return level of the investments. However, in order to have some effect on the infrastructure portfolio and to maximize relationships, a select group of investors may be utilized to invest a significant portion of the infrastructure portfolio.

## G. Investment Holding Period and Dispositions

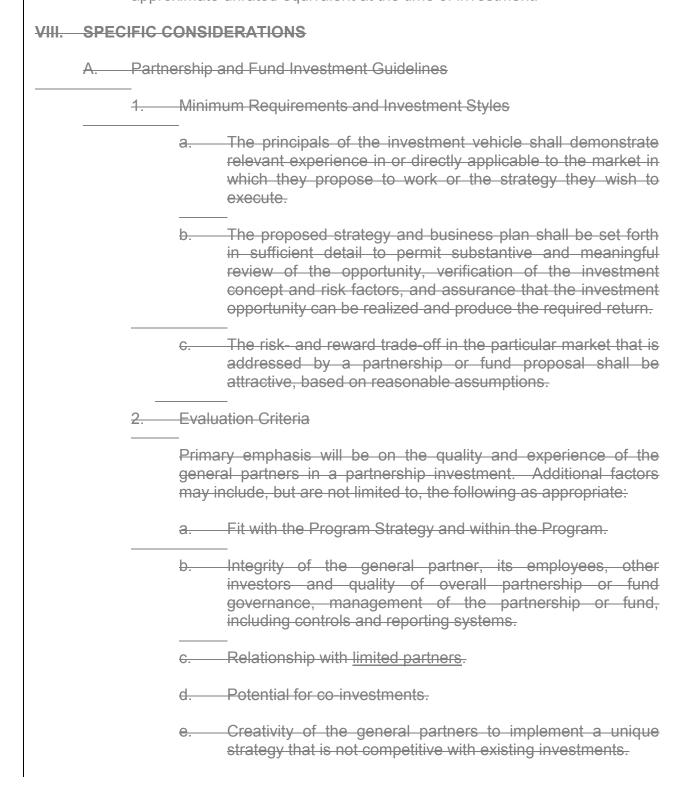
The target holding period for infrastructure assets shall generally be for long term investment (10 years or more). However, disposition of individual investments may be triggered by an opportunity to capture a return in excess of the targeted return, or by a revised investment strategy resulting from changes in markets for infrastructure assets or changes in Calpers financial objectives.

#### H. Use of Leverage

Leverage is permissible in the Program to enhance investment returns. Infrastructure assets are able to attract and service significant debt levels due to stable inflation linked cash flows, long term concessions and off-take agreements. The program shall be managed to ensure that leverage is appropriate and that it is accretive to returns considering leverage risk. Staff will consider the debt rating, debt service ratios, leverage ratios, capital ratios and stability of cash flow in addition to the debt level (leverage) to determine if debt is excessive. The Program, measured periodically and across all investments, will carry an average debt rating of BB+ by Standard and Poor's, Ba1 by Moody's or better. Where debt ratings from Standard and Poor's or Moody's are not available for individual Program investments, the amount of leverage applied to such investment shall, on an unrated basis, approximate the targeted average rating of the Program.

#### Credit Rating

For investments in debt securities, the Program will carry a minimum credit rating of BB+ by Standard and Poor"s, Ba1 by Moody"s or the approximate unrated equivalent at the time of investment.

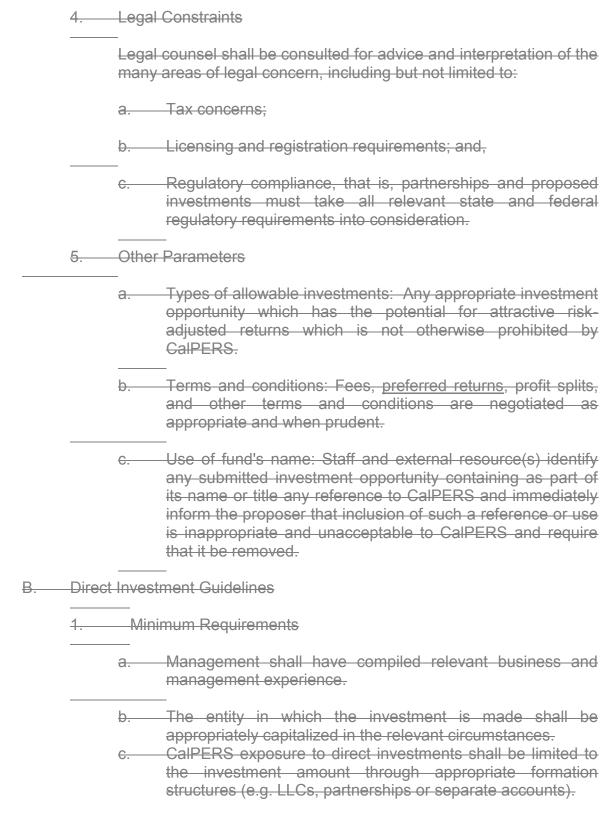


reasonable ratio of committed capital to general partners. Appropriateness of terms and conditions and alignment of interests with limited partners. Due Diligence A due diligence review by Staff and External Resources selected for reviewing a transaction shall include the following, when applicable: Review and analysis of all pertinent offering documents including but not limited to offering memorandums, subscription agreements, private placement memorandums and operative investment agreements. Consideration of potential conflicts of interest, if any, posed by the proposed investment and prior investments and activities of the principals. Review and analysis of the investment concept, including entry and exit strategies and terms including fees, principal participation, and structure. Review and analysis of the fit within the Program, including fit with the Strategy, other constraints and guidelines, and compliance with applicable investment policies. Review of background and reference of principals and review and analysis of track record including performance of prior and current investments. Investigation of special terms and side letter agreements with past or present investors. Analysis of the competition between a given proposal and an existing preferential relationship or alternative asset, which may include, but is not limited to, a review of the following: the size of the industry, the segment of the industry, and the deal flow for both the preferential relationship and the proposed investment.

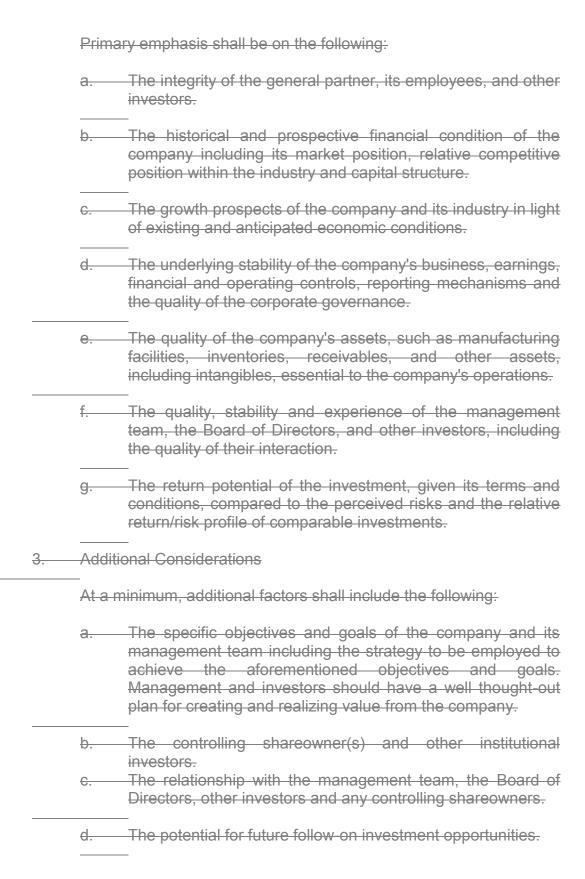
Reasonable ratio of investors to general partners and

Review of any lawsuits, litigation involving the general

partner, its principals, employees and prior funds.



Evaluation Criteria

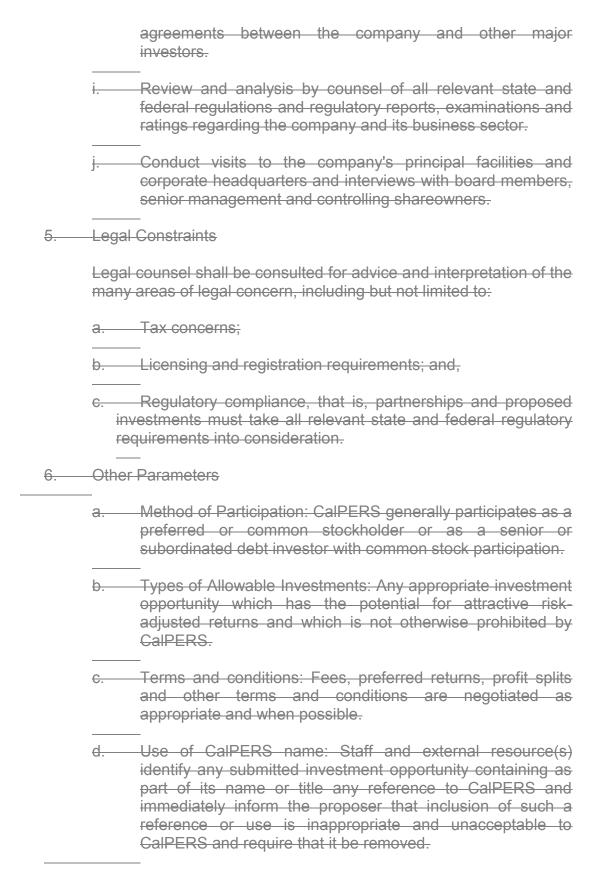


## 4. Due Diligence

For co-investments, Staff, and External Resources if utilized, will rely heavily on the work of the general partner sponsoring the transactions while conducting its own due diligence. Independently sourced investments will require a much more in-depth due diligence review because these investments do not come to CalPERS through one of the existing general partners in the portfolio.

A due diligence review by Staff and the External Resources if selected for reviewing a transaction shall include the following, when applicable:

- a. Review of whether the proposed investment falls within the Strategy, constraints and guidelines, and if it complies with applicable investment policies.
- b. Review and analysis of all pertinent documents, including offering memorandums, research reports, annual and quarterly reports, SEC reports, proxy statements and news articles regarding the company, management and industry.
- c. Performance of background checks of the senior management team and any controlling shareowners.
- d. Review of the company's historical and projected financial operating results, market position, and present financial condition, including examination of auditor reports and possible interview of the auditor.
- e. Review and analysis of any contingent liabilities, including potential liabilities related to anticipated legal action, environmental issues, under-funded pensions, taxes and insurance issues.
- f. Review and analysis of ownership structure, employee benefit plans, anti-takeover provisions, labor contracts, and as appropriate, consultation with relevant labor representatives.
- g. Performance of third party reference checks with key suppliers, customers and, when advisable, competitors.
- h. Review of the company"s instruments of indebtedness, corporate instruments, board minutes and any special



e. Corporate Governance

Consistent with CalPERS policies on Corporate Governance.

- (1) Voting: CalPERS shall maintain full voting rights with respect to any class of securities in which it might invest. Where applicable, CalPERS shall execute all proxies and voting instructions in a manner consistent with CalPERS Statement of Investment Policy for Global Proxy Voting. When appropriate, CalPERS may wish to participate as part of a voting trust agreement under which a third party (e.g., a lead investor) retains its proxy to vote CalPERS interests.
- (2) Board of Directors Representation: CalPERS shall consider seeking representation on the board of directors of a corporation in which it invests, in a manner consistent with CalPERS Statement of Investment Policy for Representation on Corporate Boards of Directors. CalPERS may wish to retain the right to have an independent representative or representatives of CalPERS appointed to a portfolio company"s Board of Directors. Furthermore, the fund should allow for the possibility to retain the right to have such representatives participate in select committees of such Board of Directors (e.g., Audit Committee).
- (3) Board of Directors Accessibility: CalPERS should strive to obtain the right to attend, as an observer, a portfolio company"s Board of Directors meeting. Directors should be accountable to CalPERS as a shareowner. To ensure this accountability, directors must be accessible to CalPERS inquiries concerning key decisions affecting the company"s strategic direction.
- (4) Board of Directors Composition: Board Composition should follow corporate governance best practices consistent with CalPERS Global Principles of Accountable Corporate Governance. CalPERS should strive to obtain agreements as to the composition of a Board of Directors, including

guidelines on the number of outside Directors and the composition of key committees.

(5) Special Voting Rights: With the exception of Global Equity portfolio companies, CalPERS should, if desirable, strive to obtain special class voting rights with respect to specific corporate governance matters such as proposals deemed contrary to CalPERS interests, for example, as in the case of hostile takeovers.

## IX. MANAGER AND PARTNER MONITORING

Staff shall monitor and evaluate managers and partners on an ongoing basis based on performance relative to stated objectives of the governing documents. The financial strength of the investment management organization, the level of client service given CalPERS and changes within the managing organization shall be evaluated. The continuity of personnel assigned to CalPERS investments and overall staff turnover shall be reviewed.

#### X. LEVERAGE

## A. Use of Leverage

Leverage is permissible in the Program to enhance investment returns. Infrastructure assets are able to attract and service significant debt levels due to stable cash flows and stable asset values. The Program shall be managed in a way that ensures that use of leverage is both appropriate and accretive to investment returns. Where use of leverage is appropriate. Staff will consider the credit rating (if any) and applicable credit metrics to determine efficient levels of leverage for the investment.

#### B. Permitted Leverage

- 1. The Program will be permitted to carry leverage up to 65% of the market value of the Program"s assets.
- Commingled Fund investments are subject to a leverage limit of 65% of the market value of the Commingled Fund sassets.
- 3. New direct investments with leverage exceeding 50% of the market value of the assets of a company, business or investment interest ("Enterprise Value" of "EV") must have the following characteristics unless otherwise approved by the Investment Committee:

- a. Minimum credit quality of BBB- or Baa3 or equivalent;
- b. Defensive or Defensive Plus risk classification.
- 4. New debt investments must have the following characteristics unless otherwise approved by the Investment Committee:
  - a. Minimum credit quality of BB or Ba2 or equivalent;
  - Defensive or Defensive Plus risk classification.

#### IX. GLOSSARY OF TERMS

There are no master glossary terms contained in this policy.

Revised by the Policy Subcommittee:

April 11, 2011
Approved by the Investment Committee:

May 16, 2011

Approved by the Policy Subcommittee:

June 15, 2011

Approved by the Investment Committee:

August 15, 2011

The following attachment was previously a policy in the Inflation-Linked Asset Class (ILAC) and was moved into the Real Assets Policy. The dates below reflect the revision history for the document:

Approved by the Policy Subcommittee:

Adopted by the Investment Committee:

Revised by the Policy Subcommittee:

Approved by the Investment Committee:

Revised by the Policy Subcommittee:

Revised by the Policy Subcommittee:

April 19, 2010

Approved by the Investment Committee:

May 17, 2010